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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,403	06/12/2001	Eric Johnstone Cook	025455-093	7025

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EXAMINER
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ADDIE, RAYMOND W

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/830,403

Applicant(s)

COOK ET AL.

Examiner

Raymond W. Addie

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 9/15/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 28-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 15 September 2003 is: a) ☐ approved b) ☒ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/15/2003 has been entered.

### ***Drawings***

## **INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

### **2. Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

### **Annotated Drawing Sheets**

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

### **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

With regard to Applicant's correction to Fig. 2, the changes are not in red ink and the amended figure is not labeled "amended". Therefore, the proposed corrected drawings are disapproved.

### ***Specification***

3. The amendment filed 9/15/2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "each compacting face (16) is generally outwardly convex and includes a re-entrant portion (16a) extending from a respective salient point (14a) in the direction of rolling and defining a tangent

(Ta) lying outside of an imaginary straight line L that extends between the two salient points located on opposite sides of the compacting face, as can be seen in Fig. 2".

Applicant is required to cancel the new matter in the reply to this Office Action. The originally filed specification, did not positively recite a "re-entrant portion 16A" nor did the originally filed specification identify any structure that could be considered the claimed "re-entrant portion (16A), to the degree that one of ordinary skill in the art, would have considered the inventor to possess the invention as claimed and as now disclosed by amendment. Therefore, the amendment to the specification is objected to for containing New Subject Matter.

***Claim Rejections - 35 USC § 112***

4. Claims 28-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 28 requires "each compacting face including a re-entrant portion extending from a respective salient point in the direction of rolling and defining a tangent lying outside of an imaginary straight line extending from such salient point to the next salient point in the direction of rolling".

As cited above, the originally filed specification does not positively recite a "re-entrant portion", nor does the originally filed specification provide antecedent basis for any specific structure, that would be considered a re-entrant portion, as claimed.

Claims 34, 36 recite "the wear plates of the second series being shorter in a circumferential direction of the roller than the wear plates of the 1<sup>st</sup> series".

However, the cited limitation does not have antecedent basis in the specification.

The only disclosure of "wear plates" is found on page 4, lns. 14-18, which states "the compaction surface 16 are formed by curved wear plates 26 and 28". There is no discussion with respect to the size of the wear plates and the figures show an opposite arrangement to that claimed.

Therefore, Claims 34-36 have not been further treated on their merits.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 28-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28 recites the phrase "each compacting face including a re-entrant portion extending from a respective salient point in the direction of rolling and defining a tangent

lying outside of an imaginary straight line extending from such salient point to the next salient point".

The tangent is not disclosed nor claimed as a tangent point or a tangent line.

Therefore, the scope of the limitation is indefinite. Further, the tangent is not defined with respect to the re-entrant portion claimed. Therefore, the actual location of the tangent, is indefinite, because one of ordinary skill in the art, would not be able to determine the structural limitations of the recited claim language, nor would one of ordinary skill in the art, be able to determine equivalent or non-equivalent structure in the related prior art.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 28-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Cobb et al. # 4,237,984.

Cobb et al. '984 discloses a rotating soil compaction roller (10) comprising a hub structure (18), defining a central axis of rotation (13) and a multi-sided, out of round,

peripheral compacting surface, which has a width measured parallel to the central axis of rotation, and which is fixed, non-adjustably to an outer periphery of the hub structure so as to be capable of rolling in a direction of rolling over a soil surface that is to be compacted when the hub structure rotates about the central axis. The compacting surface being defined by a plurality of angularly spaced salient points (20), and an equal plurality of compacting faces, each of which is generally outwardly convex in shape, and each of which extends from one salient point to an adjacent salient point, each salient point extending parallel to the central axis, the cross-section of each compacting face being arranged such that an instantaneous center of rotation of each compacting face, where that compacting face contacts the soil surface as it rolls over the soil surface. Each compacting face including a re-entrant portion extending from a respective salient point in the direction of rolling, and defining a tangent lying outside of an imaginary straight line extending from said salient point to the adjacent salient point in the direction of rolling.

In regards to Claims 29, 30 Cobb et al. clearly illustrates the compacting faces on either side of each salient point are symmetrical with respect to one another about a plane containing the central axis and said salient point, as well as being symmetrical about an imaginary radial line extending through the compacting face at a location situated midway between the salient points lying on opposite sides of that compacting face.



In regards to Claims 31, 32 Cobb et al. further discloses the salient points are equi-  
angularly spaced about the central axis and are equidistant from said central axis; as  
well as the compacting faces being smoothly, convexly shaped.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set  
forth in section 102 of this title, if the differences between the subject matter sought to be patented and  
the prior art are such that the subject matter as a whole would have been obvious at the time the  
invention was made to a person having ordinary skill in the art to which said subject matter pertains.  
Patentability shall not be negated by the manner in which the invention was made.

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cob et al. #  
4,237,984 in view of Waterman # 3,768,583.

Cobb et al. discloses a soil compaction machine comprising:

At least one soil compaction roller further comprising a hub structure (18) defining a  
central axis (13) of rotation.

A multi-sided, out of round, peripheral compacting surface which has a width measured  
parallel to the axis and which is fixed, non-adjustably to an outer periphery of the  
hub structure so as to be capable of rolling over a soil surface that is to be  
compacted when the hub structure rotates about the central axis.

A plurality of angularly spaced salient points (20) and an equal plurality of compacting  
faces, each of which is outwardly convex in shape and each of which extends

continuously from one salient point to an adjacent salient point.

Each salient point (20) extending parallel to the central axis. The cross section of each compacting face, being constant across a width thereof measured parallel to the axis and being arranged such that an instantaneous center of rotation of each compacting face, where that compacting face contacts the soil surface during rolling, moves continuously about the full extent of the compacting face.

Whereby, the roller applies a continuous kneading action to the soil surface as it rolls over the soil surface. Wherein each compacting face is symmetrical about an imaginary radial line extending through a midpoint of the compacting face.

What Cobb et al. does not disclose is a pair of soil compaction rollers mounted side-by-side. However, Waterman teaches it is desirable to provide an attachment to a prime mover, said attachment comprising a plurality of side-by-side disposed compaction rollers (50-A, 50-B, 50-C), as taught by Waterman, in order to compact larger areas of soil. See Waterman col. 4, ln. 50-col. 5, ln. 68; Cobb et al. col. 3, ln. 42-col. 5, ln. 6.

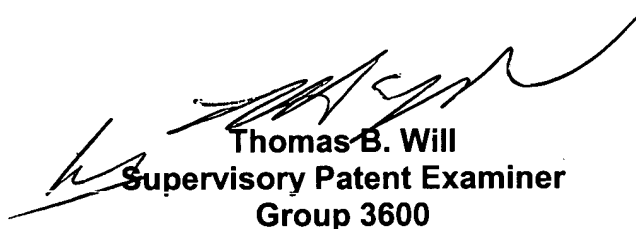
### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shepherd # 5,114,269 discloses a compaction drum.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Addie whose telephone number is (703) 305-0135. The examiner can normally be reached on Monday-Friday from 7:00 am to 2:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703) 308-3870. The fax phone number for this Group is (703) 872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.



Thomas B. Will  
Supervisory Patent Examiner  
Group 3600

RWA  
9/29/2003